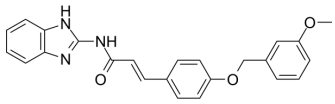
NF-κB-IN-8

Cat. No.:	HY-149248
CAS No.:	2924565-59-1
Molecular Formula:	$C_{24}H_{21}N_3O_3$
Molecular Weight:	399.44
Target:	NF-κB
Pathway:	NF-κB
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description

NF-κB-IN-8 competitively antagonizes LPS binding to MD-2. NF-κB-IN-8 reduces the expression of inflammatory factors by binding to MD-2. NF-κB-IN-8 also inhibits ALP activity. NF-κB-IN-8 can be used for the research of inflammation such as acute lung injury (ALI)[1].

In Vitro

NF-κB-IN-8 (Compound L26) (10 μM) inhibits ALP activity by 64.30%[1].
NF-κB-IN-8 (1-10 μM, 24 h) inhibits expression of IL-6 and TNF-α in RAW 264.7 cells[1].
NF-κB-IN-8 (0-50 μM) inhibits the binding of LPS to MD-2, determined by ELISA Asssay[1].
NF-κB-IN-8 (50 μM, overnight) inhibits the formation of LPS/MD-2/TLR4 polymers in RAW264.7 cells[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	RAW264.7 cells
Concentration:	50 μM
Incubation Time:	Overnight
Result:	Inhibited the expression of LPS/MD-2/TLR4 polymers.

In Vivo

NF-κB-IN-8 (Compound L26) (5 mg/kg, intra-gastrically administration) attenuates LPS-induced ALI in mice[1].
NF-κB-IN-8 (1000 and 1500 mg/kg, intra-gastrically administration) is low in toxic and safe in mice[1].
NF-κB-IN-8 (10 mg/kg, rats) shows $T_{1/2}$: 4.2 h, C_{max}: 163.288 μg/L[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	ALI mice induced by LPS[1]
Dosage:	5 mg/kg
Administration:	Intra-gastrically administration
Result:	Downregulated the expression of pro-inflammatory factor Mrna (TNF-α). Decreased ALP level in bronchoalveolar lavage fluid. Inhibited the phosphorylation of p65 and increased the release of IκB-α. (WB assay, lung

	tissue sample)

REFERENCES

[1]. Li X, et al. Novel O-benzylcinnamic acid derivative L26 treats acute lung injury in mice by MD-2. Eur J Med Chem. 2023 Apr 5;252:115289.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA